

Varimixer

1996-Present



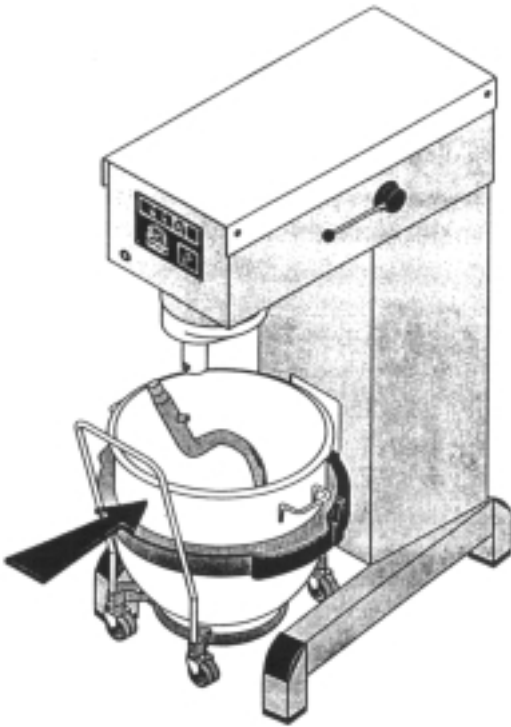
OPERATING INSTRUCTIONS

FOOD MIXER

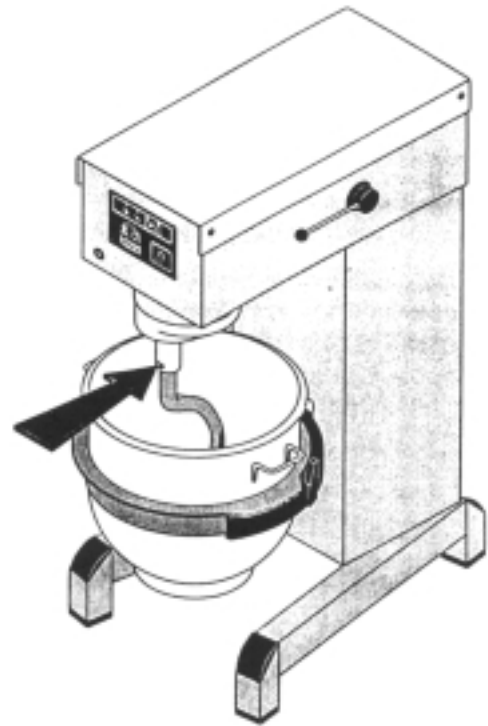
W150N

MK-I

MKI OPERATING INSTRUCTIONS



Place the bowl in the bowl arms. Check that the bowl is placed correctly and pushed all the way into the bowl arms. (Bowl truck is optional equipment).



Place the mixing tool in the bayonet shaft. The pin on the mixing tool must be turned into the bayonet groove.



The bowl is raised and lowered by turning the switch to the up or down arrow, respectively. Ensure that the bowl is placed correctly while the bowl is lifted. The bowl is only moving as long as the control knob is activated.



If the mixer is equipped with a timer, set the time required, by turning the timer to the right. The timer will start at the same time as the mixer when the green start button is pushed, and the mixer will stop automatically, when the time runs out. If the mixer is stopped before the set mixing time has run out, the timer will also stop, and will not continue until the mixer is re-started.

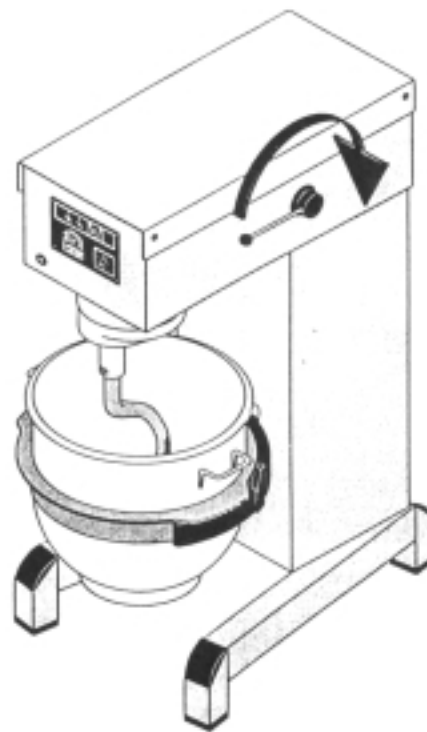
Set the timer on "HOLD" when not used; otherwise the mixer will not start.



When the bowl is lifted to its working position, the green start button > | < is shining, and the mixer can be started by pushing the button.

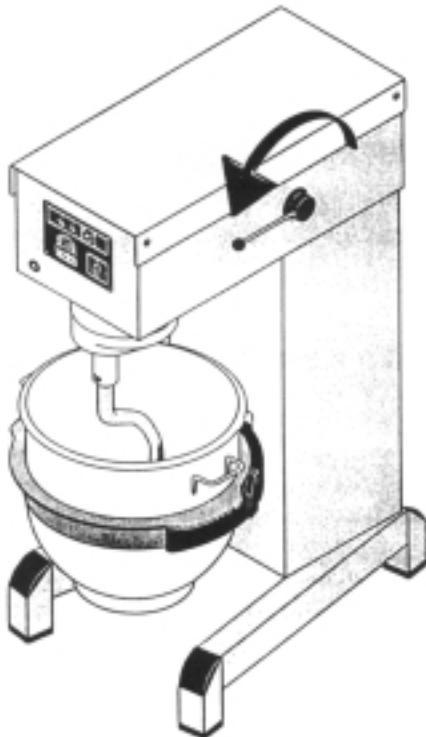
When the mixer is started, the green lamp will be extinguished, and the red stop button will shine.

If both lamps are shining and the mixer is **not** starting, a safety guard might be open, or the timer has run out. The timer must then be set to a time or on "HOLD".



When the mixer has been started, push the speed selector lever backwards to obtain the required speed.

The speed must be changed only when the mixer is running.



Before the mixer is stopped, the speed selector lever **must** be moved to the lowest speed.

The mixer must not be started when loaded in high speed position.



When the speed has returned to **low speed** the mixer is stopped by pushing the red stop button > 0 <.

When the mixer is stopped, the red stop button is extinguished, and the green start button will shine.

If the mixer is stopped when loaded in high speed, the bowl must be removed from the mixer and the speed set to lowest speed before the bowl is placed in the mixer again.



The "JOG" Function:

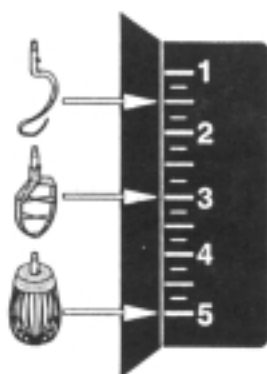
The mixer is provided with a special "JOG" function which can be used if the bowl is filled with a very sticky and heavy dough, and the tool can hardly pass through when the bowl is lifted.

When the bowl is a little more than half up, the green "JOG" button is shining, and the function is ready for use. By setting the adjusting knob to "bowl up" at the same time as the "JOG" button is pushed, the motor of the mixer will start and the bowl will go up.

If the adjusting knob is set to "bowl down" at same time as the "JOG" button is pushed, the motor of the mixer will start, but for safety reasons the bowl will not go down.

When the bowl is in its highest position, this function will automatically be switched off.

The "JOG" function **cannot** be used if an emergency stop button might be activated, or a safety guard might be open. At the same time the timer must be activated or be in position "HOLD".



Recommended maximum speeds.

GENERAL INFORMATION:

The mixer is designed for manufacture of products which do not during processing cause reactions or emit substances which may be detrimental to the user.

Do not overload the mixer. Sticky and heavy doughs may reduce the capacity of the bowl by 75%. The capacity is further reduced if the speed of the mixing tool is increased beyond the recommended values or if a wrong mixing tool is used. Large lumps of fat or cooled ingredients must be cut into small parts before they are placed in the bowl.

Prolonged overload will make the mixer's motor protection disconnect the mixer. Leave the mixer for approx. 3 minutes whereafter the mixer can be restarted.

Putting your fingers in the bowl while the mixer is running may cause injuries.

CLEANING:

The mixer should be cleaned daily or after use. The mixer should be cleaned with a soft cloth and clean water. Sulphonated soaps should be used with caution as they destroy the mixer's lubricants. Washing-down with a hose is not recommended. Bowls and mixing tools must be washed in soaps which do not attack aluminium. The soap suppliers can recommend the correct type of soap.

INSTALLATION:

The mixer can be placed directly on the floor. Foundation bolts in the floor are only necessary under special conditions, e.g. on ships. Spacers can be inserted under the mixer's feet, if the floor is not completely even.

Check that the voltage and frequency specified on the mixer's machine label are correct in relation to the place of installation. The machine label is placed at the top right side of the mixer. If the mixer is equipped with a 5 conductor cable, the mixer must also be connected to 0 (N). The arrow on the front of the planetary head indicates the direction of rotation of the planetary head. On 3-phase motors the direction of rotation is changed by interchanging 2 phases of the connection cable or the motor.

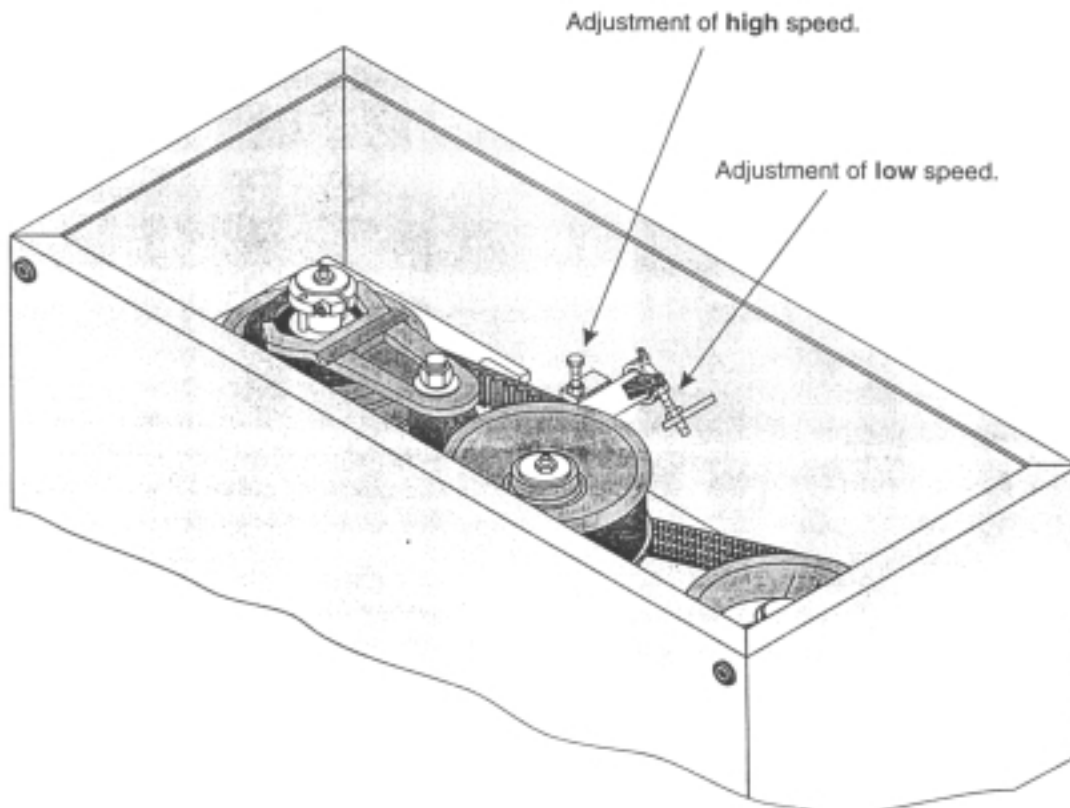
DIRECTIONS FOR ADJUSTMENT

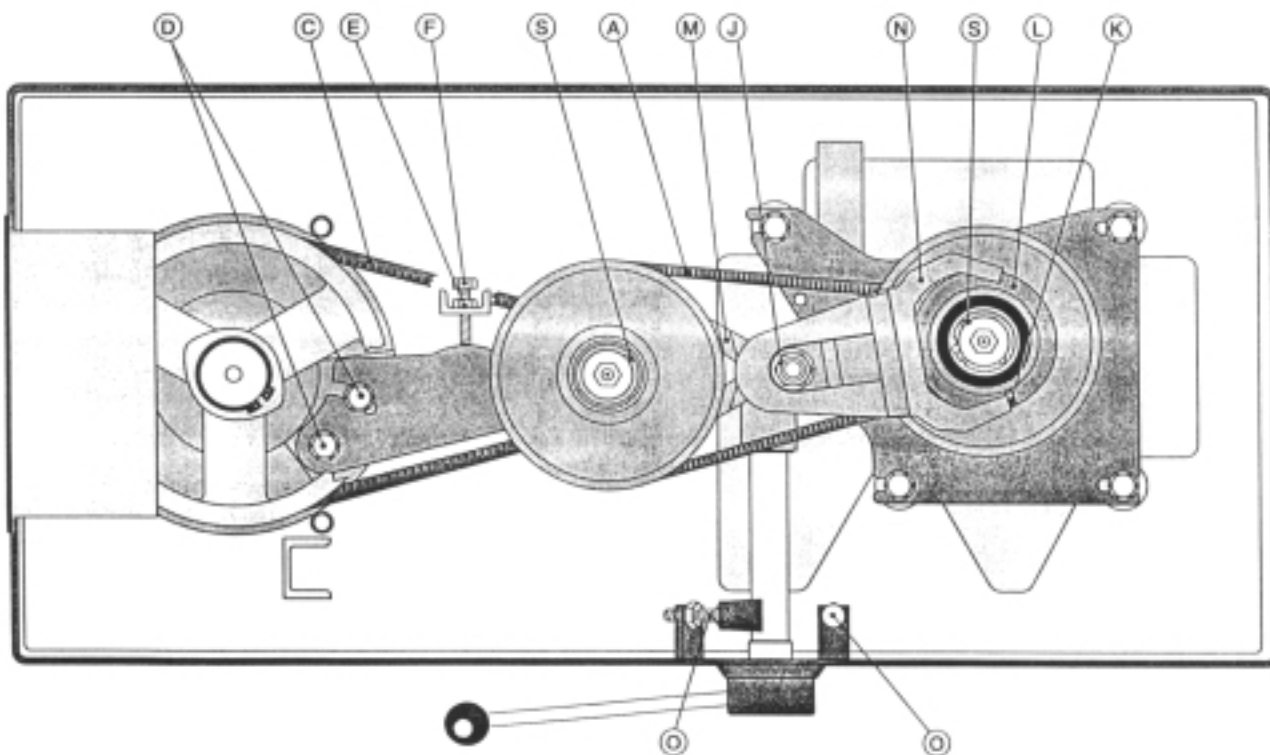
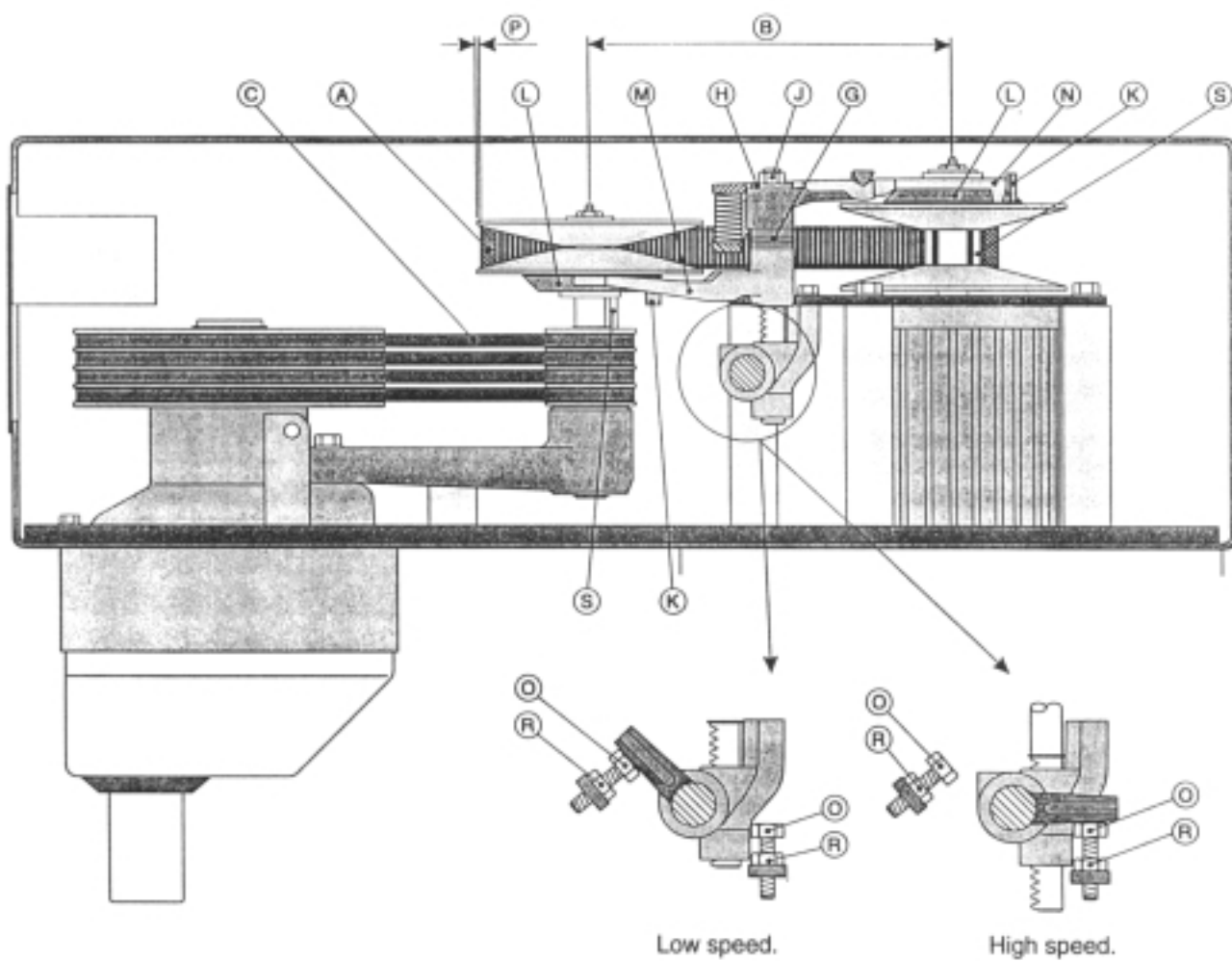
ADJUSTMENT OF SPECIAL V-BELT AND SPEED:

A loose or worn special V-belt (A) can make the mixer change the speed by itself.

The distance (B) = 305 ± 3 mm, is only indicative as it depends on the tolerance of the special V-belt.

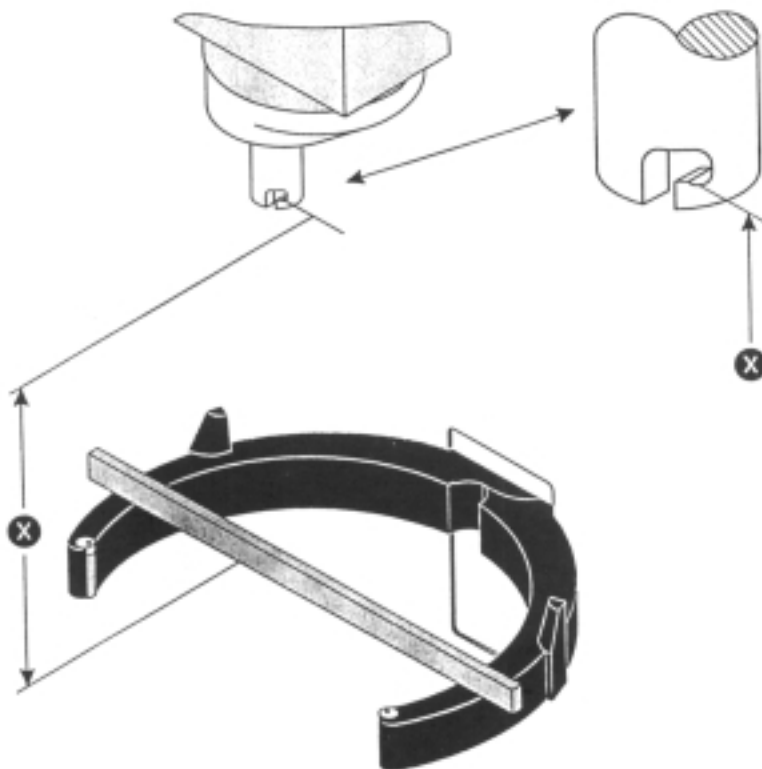
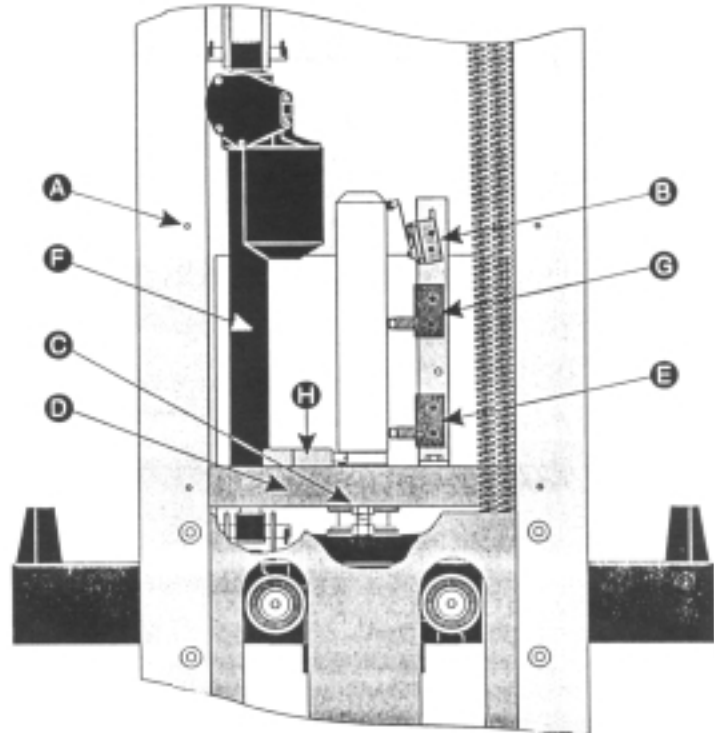
1. Start by tightening the V-belts (C).
 - 1.1 Loosen the bolts (D) and the counter nut (E).
 - 1.2 Tighten the bolt (F) until the V-belts are tense and tighten the counter nut (E).
 - 1.3 Tighten the bolts (D)
2. Tighten the special V-belt (A) by moving one or two washers from (G) to (H).
 - 2.1 Start the mixer and leave it running while the nut (J) is tightened. Do not tighten it too much.
 - 2.2 On the front pulley set the stud (K) on the varispeed collar (L) must be placed inside the lower fork (M), and on the rear pulley set outside the fork for belt tightener (N).
3. Adjust the speed by turning the stop screws (O) out or in.
 - 3.1 The stop screws (O) on the speed lever should be adjusted so that the measurement (P) is 1-2 mm on the front and the rear pulley, at low and high speed, respectively. Tighten the counter nuts (R) when the speed is correctly adjusted.
 - 3.2 Tolerances in the transmission might cause that the special V-belt (A) is hitting the pins of the pulley sets (S), when the speed has been adjusted. In such cases the distance (B) must be reduced, and the speed must be readjusted.





ADJUSTMENT OF BOWL HEIGHT:

1. Remove the screws (A) from the mixer's rear plate and remove the rear plate.
2. The top position of the bowl can be adjusted by micro switch (B) and stop screw (C).
 - 2.1 The adjustment must be made so that the micro switch is activated **before** the stop screw hits the stop (D). Carry out the adjustment with empty bowl.
3. The bottom position of the bowl is set by the micro switch (E).
4. If the bowl lift motor (F) has been exchanged, it must be checked that the bowl lift motor does not reach its outer positions when the bowl is lifted or lowered, respectively.
5. The micro switch (G) activates the special "Jog" function of the mixer when the bowl is approx. half way up. See page 4.
6. The micro switch (H) ("GS" bowl lift) is placed in a special safety cycle which is only mounted in countries demanding this. The micro switch switches off the motor of the mixer when the bowl is lowered. This is a double safety cycle as the function is built into the standard control equipment.

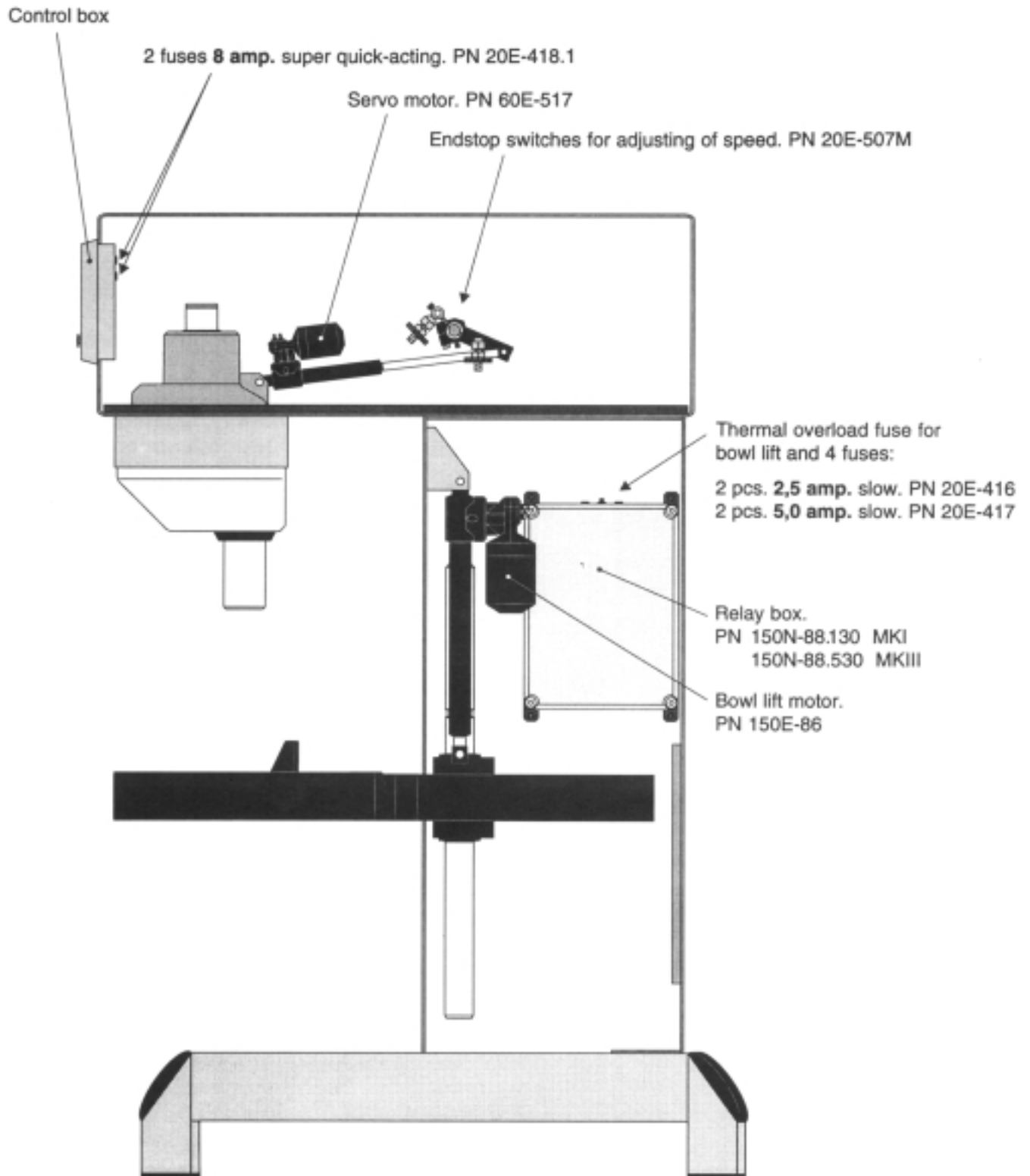


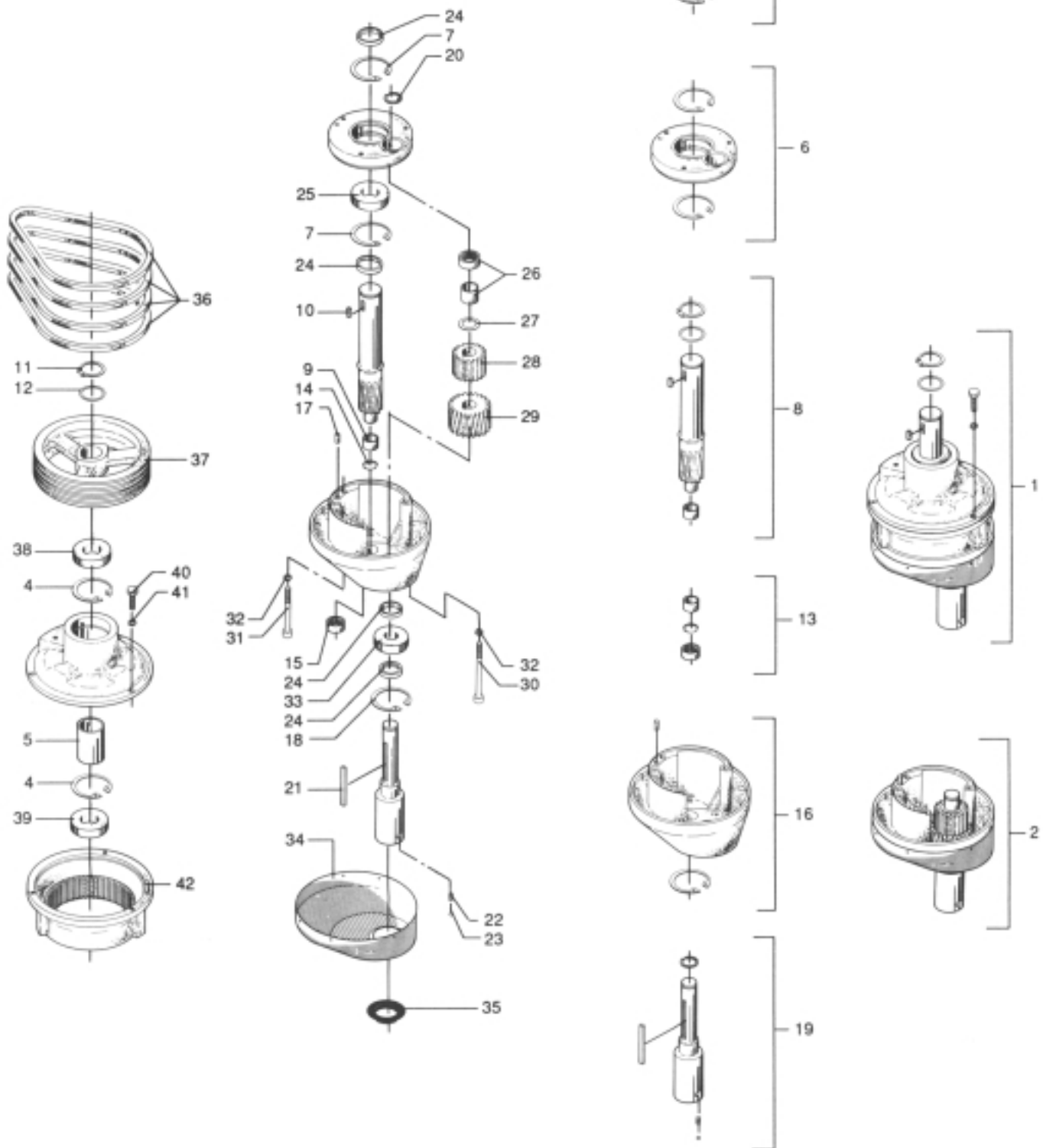
(X) = 303,25 mm

The distance (X) is measured from the bottom side of the bayonet hole to the surface on the bowl arms on which the bowl rests. The bowl arms must be lifted to normal working position. A steel guide can be used on top of the bowl arms.

Please notice that the measurement is made from the bottom side of the bayonet hole, no from the bottom side of the bayonet shaft.

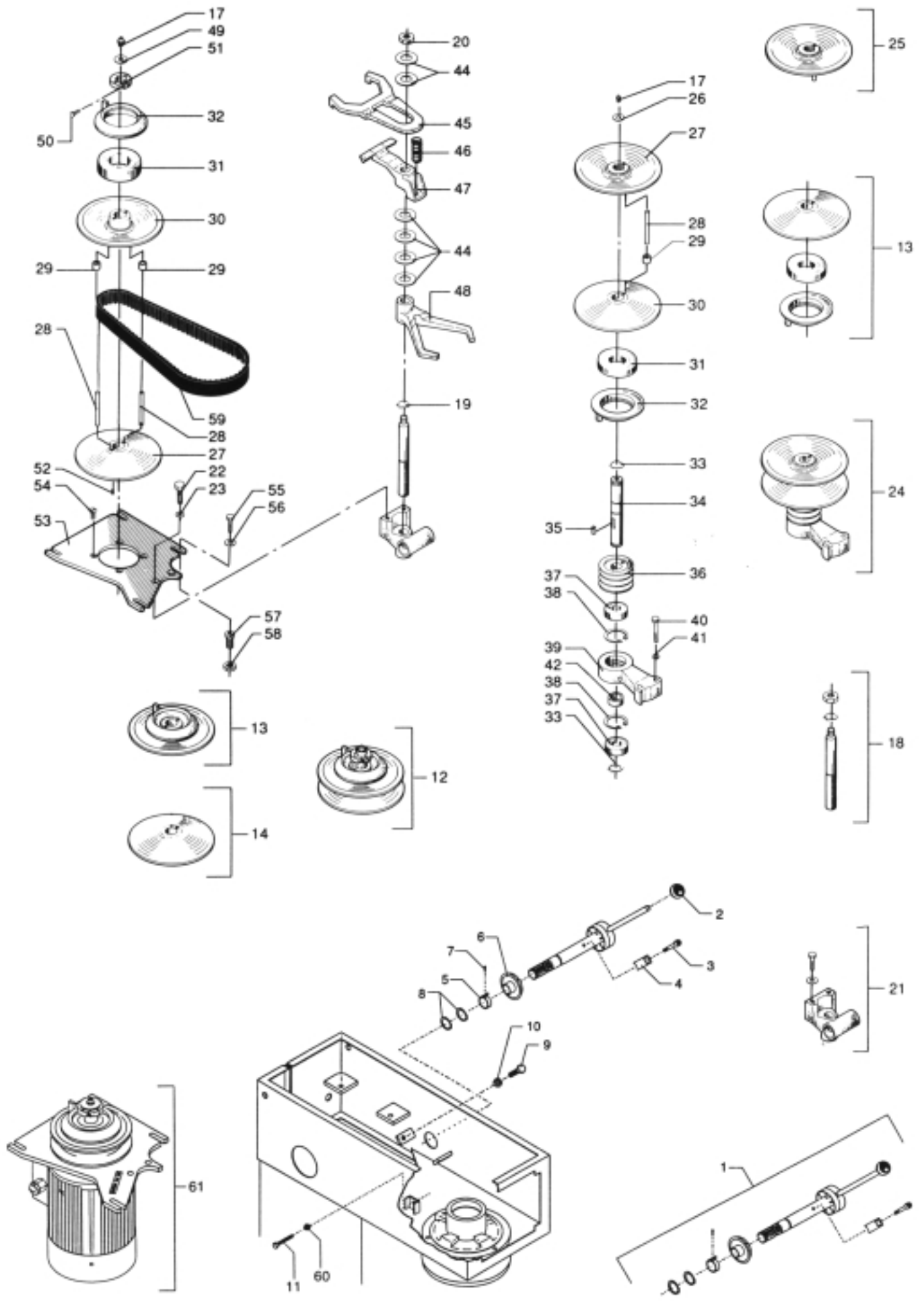
LOCATION OF COMPONENTS AND FUSES:





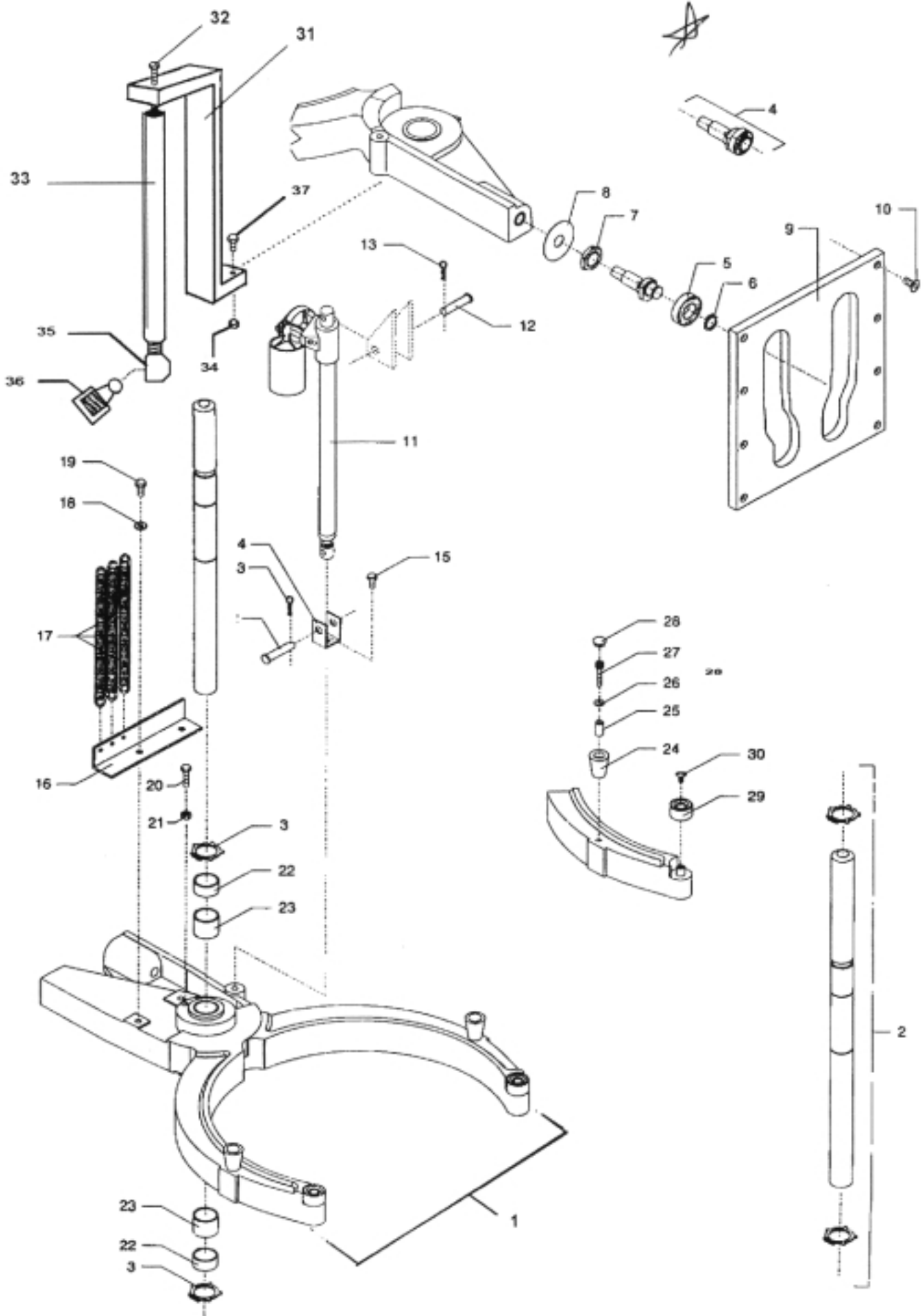
PLANETARY HEAD

Fig. No.	Order No.	Description
1	150N-2m	planetary head assy.
2	150N-2.1m	eccentric head mounted
3	100-3m	main bearing mounted
4	STA3532	circlip 100l
5	100-141	distance tube
6	100-36	eccentric disc mounted
7	STA3530	circlip 90l
8	100-30	main shaft assy.
9	LR30	needle bearing roll 30x35x20.5
10	STA2030	key B8x7x20
11	STA3435	circlip 55UC
12	STA6048	washer 56x72x0.5
13	100-101	needle bearing compl.
14	100-108R	oilseal
15	BK3520	needle bearing ring
16	100-2	eccentric
17	STA6460	groove pin $\varnothing 8 \times 24$
18	STA3532	circlip 100l
19	150N-33	bayonet shaft assy.
20	STA3478	circlip SW40
21	STA2044	key A8x7x126
22	15-109	spring f/33
23	60-106	ball 3/8 s.s.
24	100-37	distance piece
25	100-100	ball bearing f/30m, 6011 2RS1C3
26	100-96	needle bearing f/33 \varnothing , HK 4520 2RS
27	100-235	disc
28	150N-31	rim pinion
29	150N-32	rim pinion, lower
30	STA5650	screw M10x160
31	STA5644	screw M10x100
32	STA6057	lockwasher 10mm
33	100-97	ball bearing f/33n, 6211 2RS1C3
34	100-272	headcap
35	100-209	rubber ring f/33
36	100N-90.1	v-belt xpa 1132
37	100N-129A	V-Belt Pulley
38	100-99	ball bearing f/30m, 6211 2RS1C3
39	100-99	ball bearing f/30m, 6211 2RS1C3
40	STA5346	screw M10x40
41	STA6057	lockwasher 10mm
42	100-1	gear wheel rim



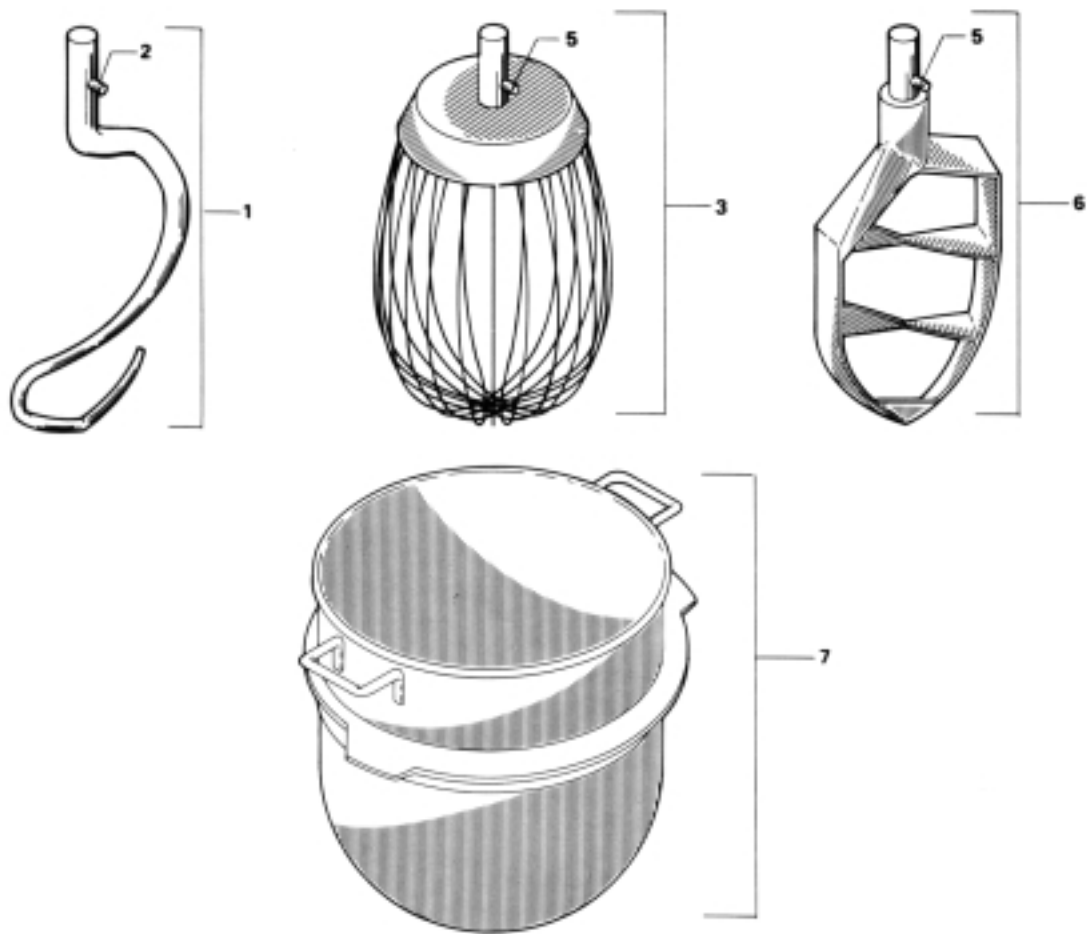
TRANSMISSION

Fig. No.	Order No.	Description
1	150N-47M	speed selector lever, assy.
2	STA3306	knob
3	STA5636	screw M8x40
4	20-310	tube
5	30-47.11	clamp
6	30-47.10	disc with arrow
7	STA5247	screw 8x13
8	STA3414	circlip A30
9	STA5450	screw M12x50
10	STA5827	nut M12
11	STA5439	screw M8x60
12	150N-59M	motor pulley set
13	60-15.1M	pulley movable, assy.
14	150N-13m	pulley assy.
16	15-156	thread nipple
17	STA3220	grease nipple
18	15-46	toothed rack assy.
19	STA3407	circlip 19U
20	STA5815	nut M16
21	15-18	bearing bracket assy.
22	STA5345	screw M10x30
23	STA6026	washer 20x10x2.5
24	100N-6m	arm for bearing assy.
25	60-13m	pulley assy.
26	STA6018	washer 40x13x3
27	60-13	pulley
28	60-285	pin
29	STA2505	bearing bush MB0610DU
30	60-15	pulley, movable
31	15-103	ball bearing f/15 6010 2RS1
32	15-17	varispeed collar
33	STA3410	circlip 25U
34	100N-41	bearing shaft
35	STA2022	key B6x6x22
36	100N-128	standard v-belt pulley
37	27-102	ball bearing f/41n 6205 2RS1C3
38	STA3514	circlip 521
39	100N-6	arm for bearing
40	STA5348	screw M10x55
41	STA6025	washer 10mm
42	100N-143	distance tube
44	STA6040	washer
45	20-19	fork for belt tightener
46	40P-275	spring f/tightening the v-belt
47	20-26	support bracket
48	27-16	lower fork
49	STA6018	washer 40x13x3
50	STA5612	screw M5x20
51	27-227	clamping ring
52	STA5602	screw M5x10
53	60-61.1	base for motor
54	STA5018	screw M8x20
55	STA5433	screw M8x25
56	STA6026	washer 20x10x2.5
57	20-148	threaded bush
58	STA5815	nut M16
59	60-91	special v-belt
60	STA5810	nut M8
61	150N-85.50	motor assy. 208/3Ph/60 Hz 5.5 HP

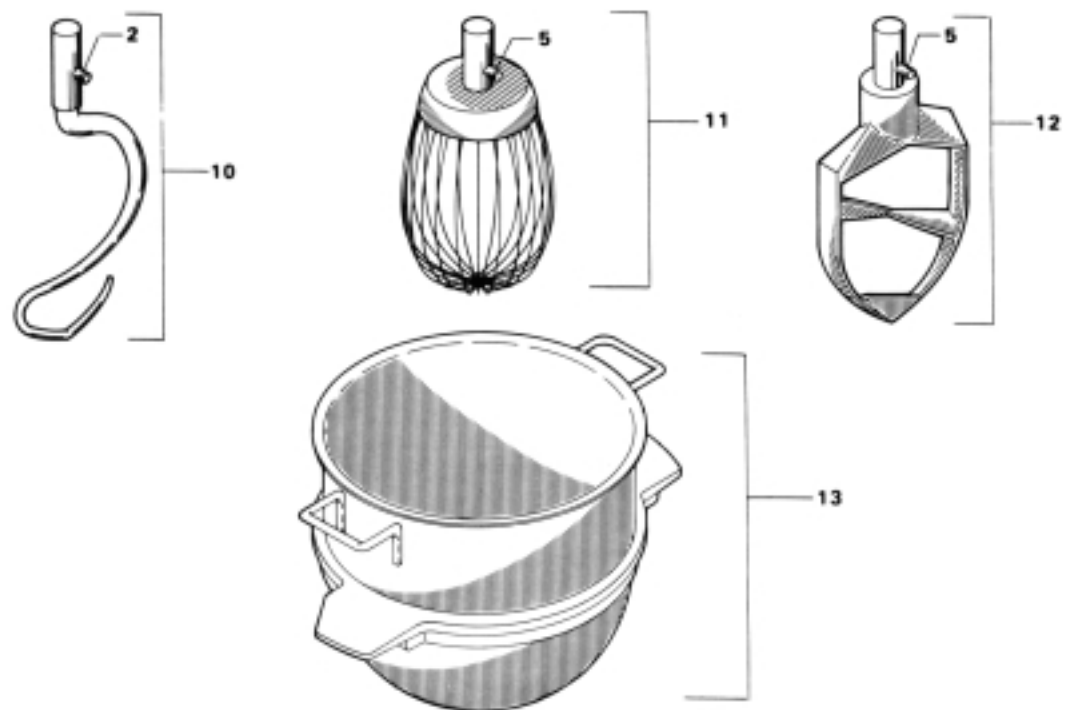


LIFT SYSTEM

<u>Fig.No.</u>	<u>Order No.</u>	<u>Description</u>
1	140-23/24	BOWLARMS
2	140-68	BOWL ARM SHAFT
3	STA 3464	SNAP RING 50UK
4	140-69M	ECCENTRIC/MOUNTED
5	361205R	SUPPORT ROLLER
6	STA 3467	SNAPRING AS25
7	140-70	NUT M30X2
8	140-69.1	LOCK PLATE
9	140-71.1	BOWL ARM GUIDE PLATE
10	STA 5620	SCREW M10X25
11	150E-86 (1993-1997)	BOWL LIFT MOTOR
11A	140-86.5 (1998-	BOWL LIFT MOTOR 220V 250MM
11B	140-86.6 (1998-	BOWL LIFT MOTOR 115V,250MM
11C	140-86.15 (1998-	BOWL LIFT MOTOR 24V , 250MM
11D	140-87	WHITE CONTROL BOX (BOWL LIFT)
11E	140-430	TRANSFORMER 240/120
11F	140-430.1	TRANSFORMER 480/240 OPTION
12	150E-70.2	PIN FOR SERVO MOTOR
13	STA 6205	COTTERPIN
14	140-116	FITTINGS FOR B/L MOTOR
15	STA 5454	SCREW M12X25
16	140-117	FITTINGS FOR SPRING
17	60-110	LIFTING SPRING
18	STA 6010	WASHER 10.5X20X2.0
19	STA 5344	SCREW M10X25
20	STA 5345	SCREW M10X30
21	STA 5825	NUT M10
22	STA 2527	BUSHING
23	STA 2530	BUSHING
24	140-127	ROLL FOR BOWL RING
25	140-128	BUSHING
26	STA 6010	WASHER 10.5X20X2.0
27	STA 5678	SCREW M10X50
28	STA 6518	PLUG BUTTON
29	31-128	ROLL FOR CLAMPING
30	STA 5088	SCREW M8X16 S/S
31	140-119	BRACKET
32	140-120	BOLT
33	140-121m	DAMPNER
34	STA 5811	NUT M12
35	140-121.1	SOCKET JOINT
36	140-121.2	BALL JOINT
37	STA 5450	BOLT M12X50



OPTIONAL



TOOLS AND BOWLS FOR 150N

Fig. No.	Order No.	Description	Accessory Part No.
1	150-78N	hook assy. 150 qt.	213/150N
2	100-79	tool pin for hook	—
3	150N-28m	whip assy. 150 qt.	207/150N
5	STA6263	tool pin beater or whip	—
6	150N-27m	flat beater assy. 150 qt.	205/150N
7	150N-75m	bowl assy. 150 qt.	203/150N

OPTIONAL EQUIPMENT

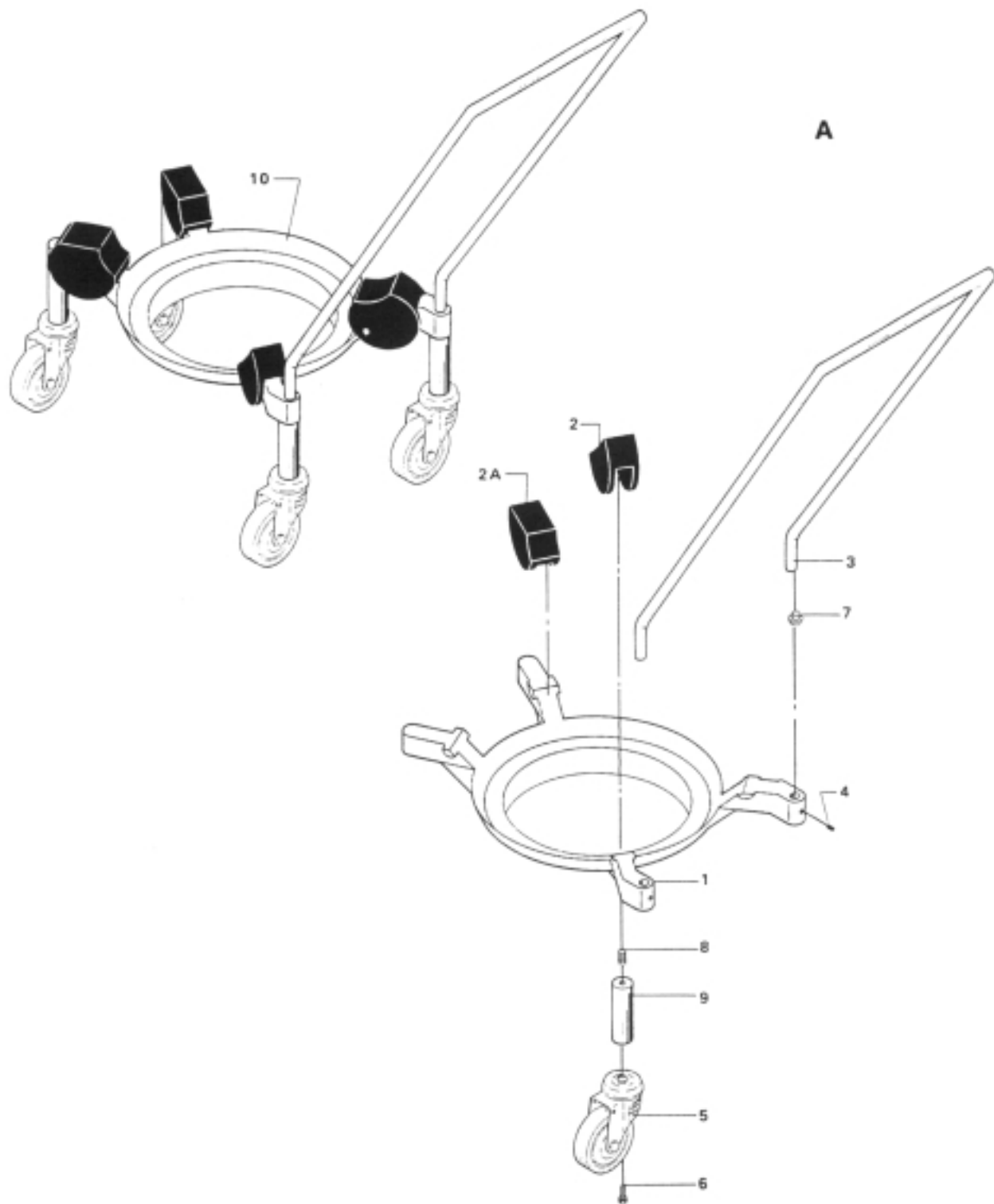
Fig. No.	Order No.	Description	Accessory Part No.
10	150N-78AM	hook assy. 80 qt.	213/80BN
11	150N-28AM	whip assy 80 qt.	207/80BN
12	150N-27AM	flat beater 80 qt.	205/80BN
13	150N-75AM	bowl assy. 80 qt.	203/80BN

BOWL SCRAPER OPTIONAL EQUIPMENT

224-150N — bowl scraper assy. — not shown

BOWL SCREEN OPTIONAL EQUIPMENT

225-150N — bowl screen assy. — not shown

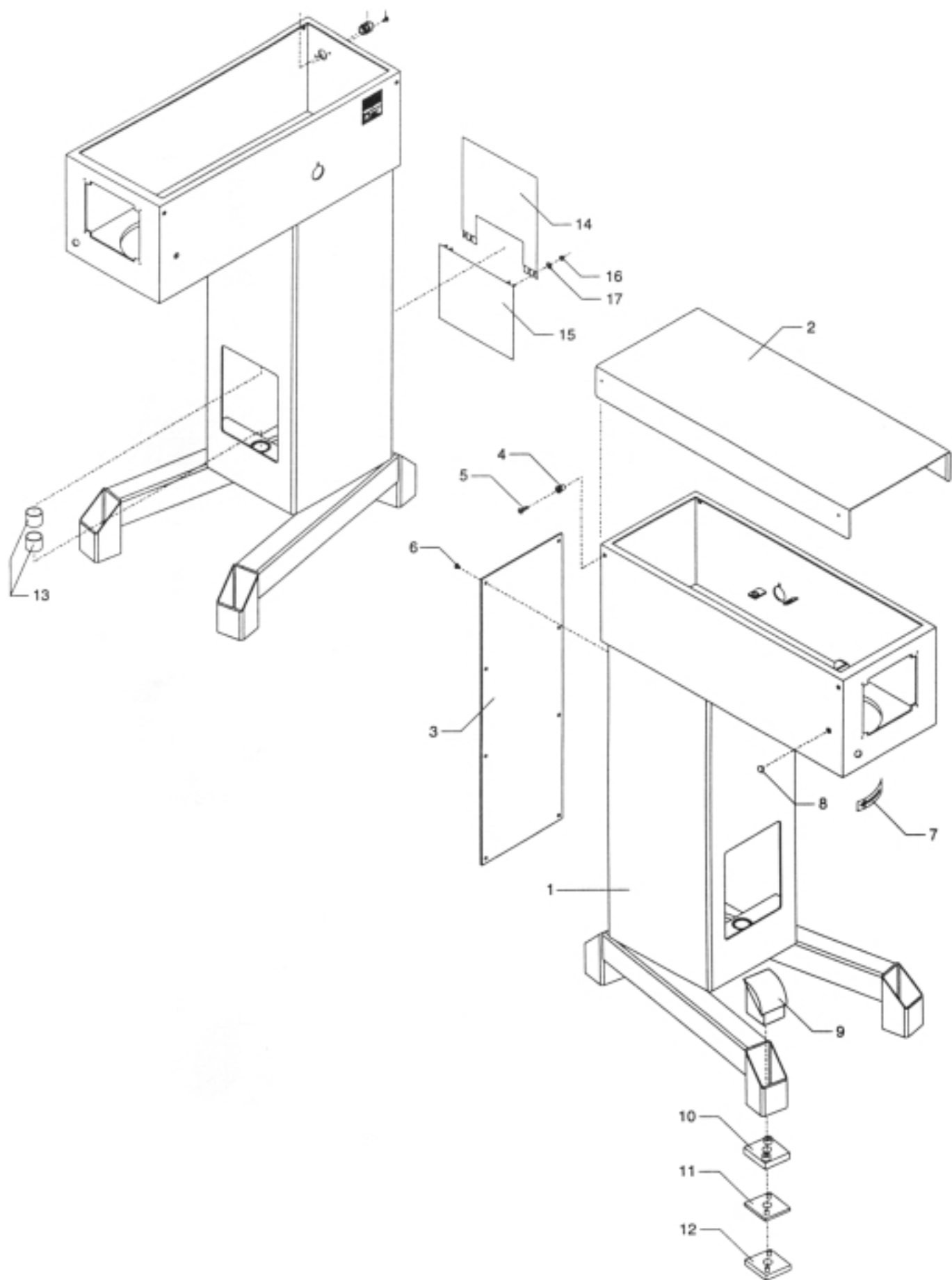


**BOWL TRUCK ASSY. OPTIONAL EQUIPMENT
FOR 150N BOWL**

Fig. No.	Order No.	Description	Accessory Part No.
1	215/150W	Bowltruck	
2	100-206	Rubber block	
2A	100-206A	Rubber block, front	
3	22R270	Handle	
4	STA 5602	Screw M5x10 Hex. socket	
5	22R30-520	Castor	
6	STA 5642	Screw M10x25 Hex. socket	
7	STA 6513	Plug button	
8	STA 5608	Screw M10x35 Hex. socket	
9	22R140.1-7W	Distance piece (105mm) 4 1/8"	
10	22W100N	Bowltruck, assy.	215/150N

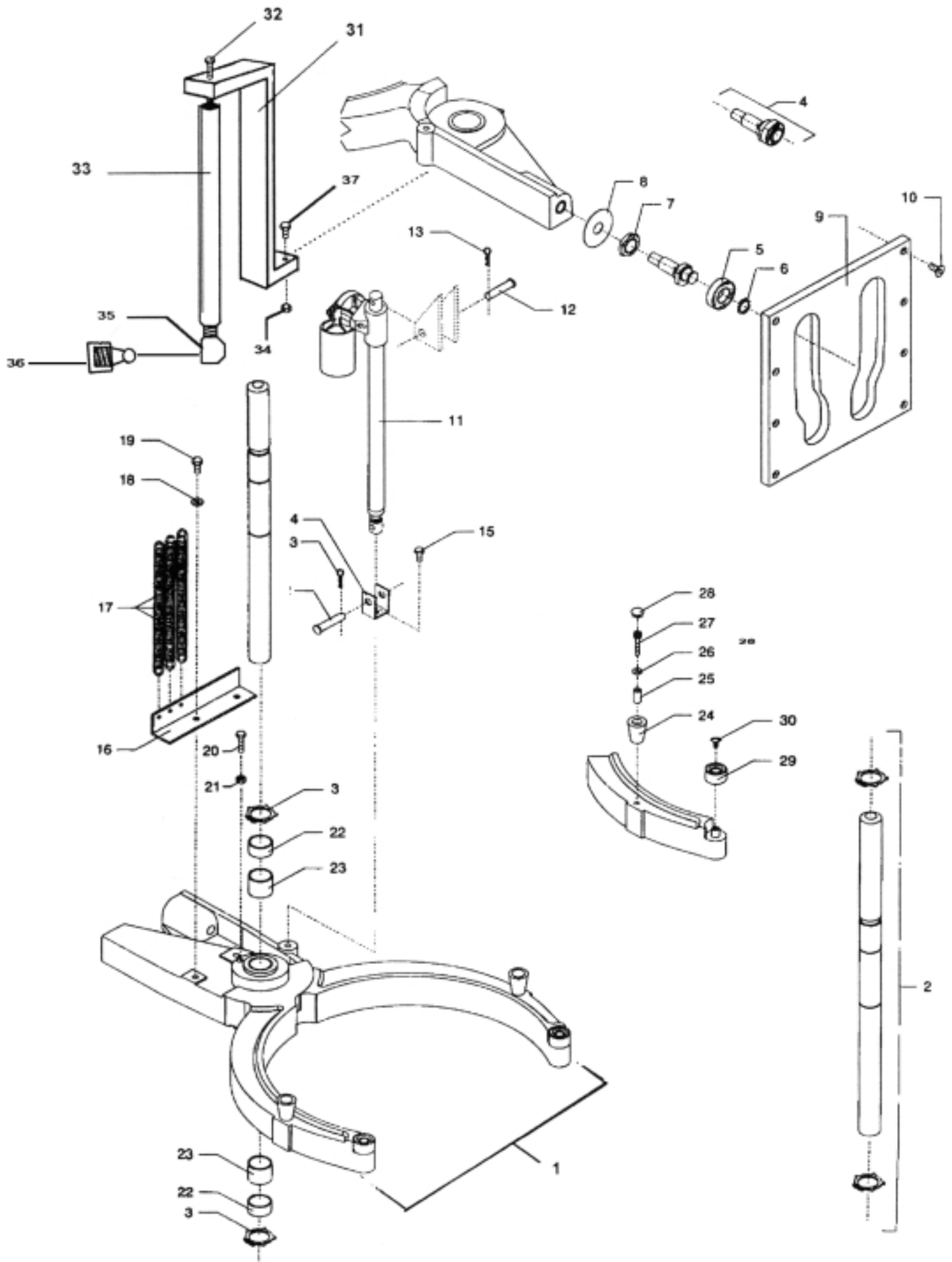
80BN BOWL

215/80BN	Bowl Truck Assy for 80 Qt. Bowl
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MACHINE COLUMN

Fig. No.	Order No.	Description
1	140-22MO	Machine Column
2	140-21	Top Lid
3	140-33.17MO	Rear Access Plate
4	STA 6580	Threaded Bushing
5	STA 5017	Screw M6x20
6	STA 5080	Screw M6x10 S.S
7	15-245	Arrow
8	STA 6519	Plug Button
9	80-212	Knee Pad
10	80N-214.6	Spacer 6MM
11	80N-214.3	Spacer 3MM
12	80N-213	Foot
13	STA 2530	Bowl Arm Bushings
14	140-270	NSF Plate, Upper
15	140-274	NSF Plate, Lower
16	STA 5834	Lock Nut M5
17	STA 6027	Washer 18x6.4x1.6 MM

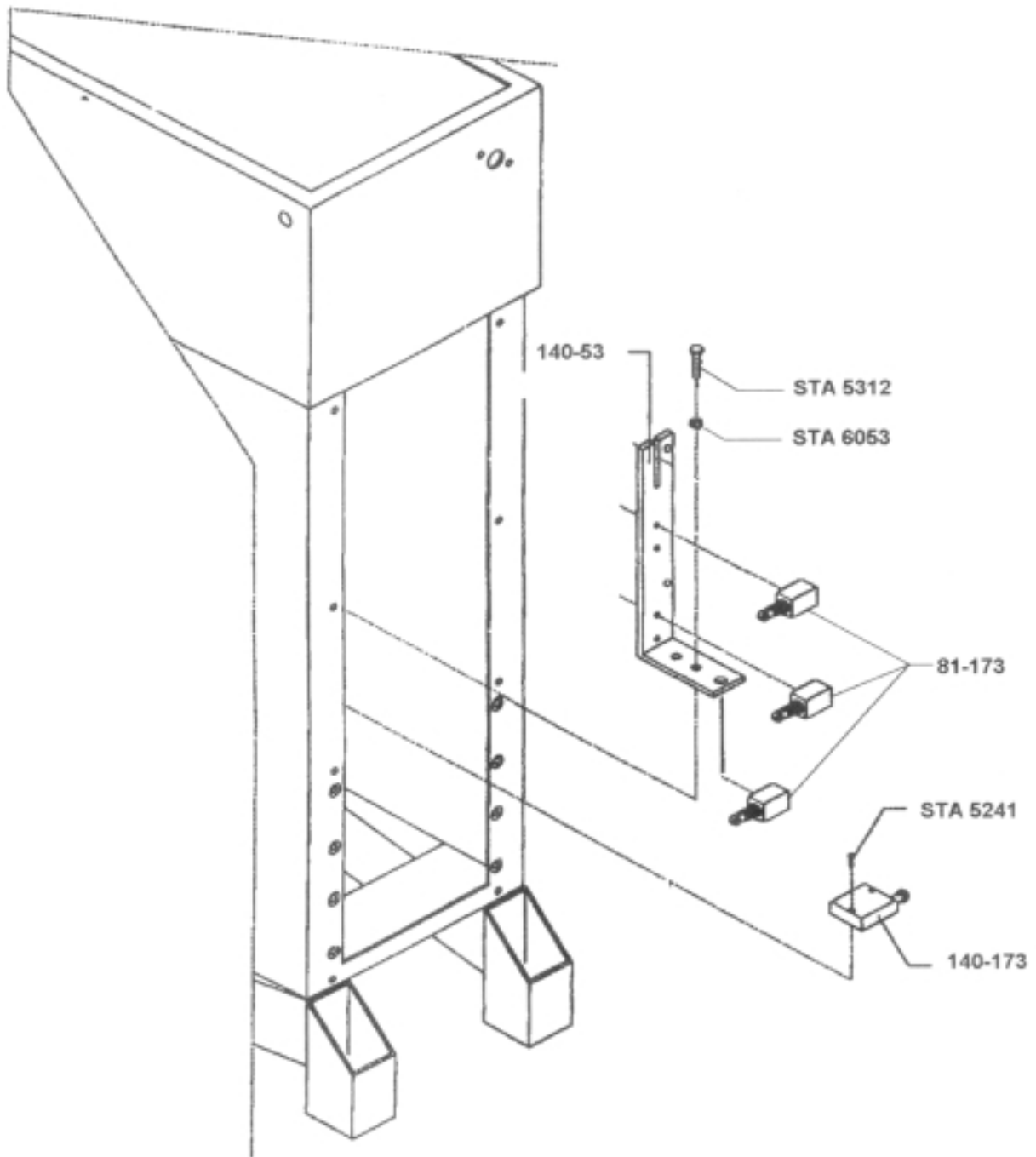


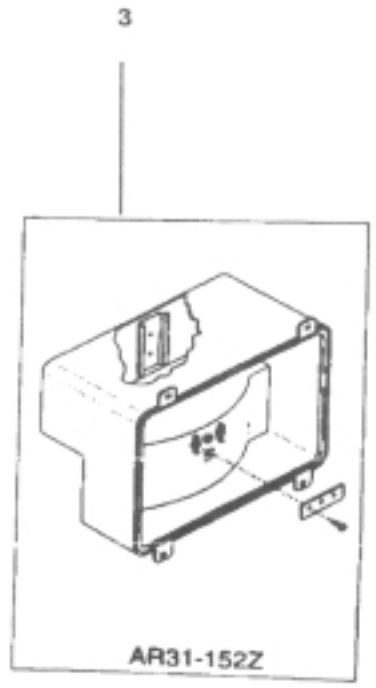
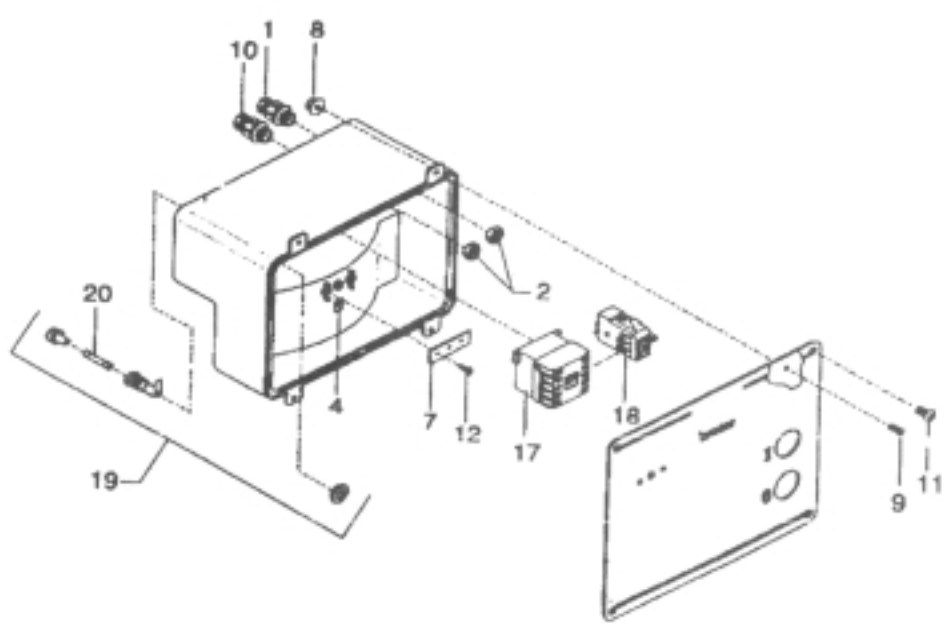
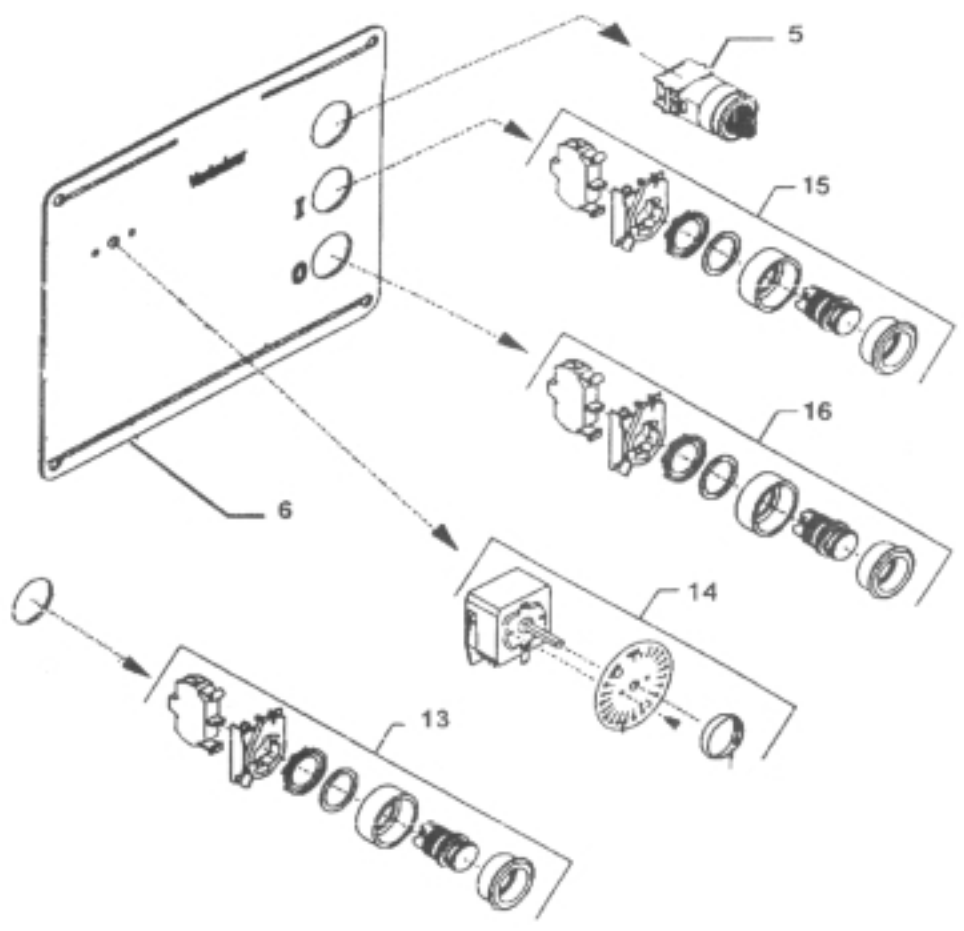
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35	140-121.1	SOCKET JOINT
36	140-121.2	BALL JOINT
37	STA 5450	BOLT M12X50

MICROSWITCH STAND

06/98 & On

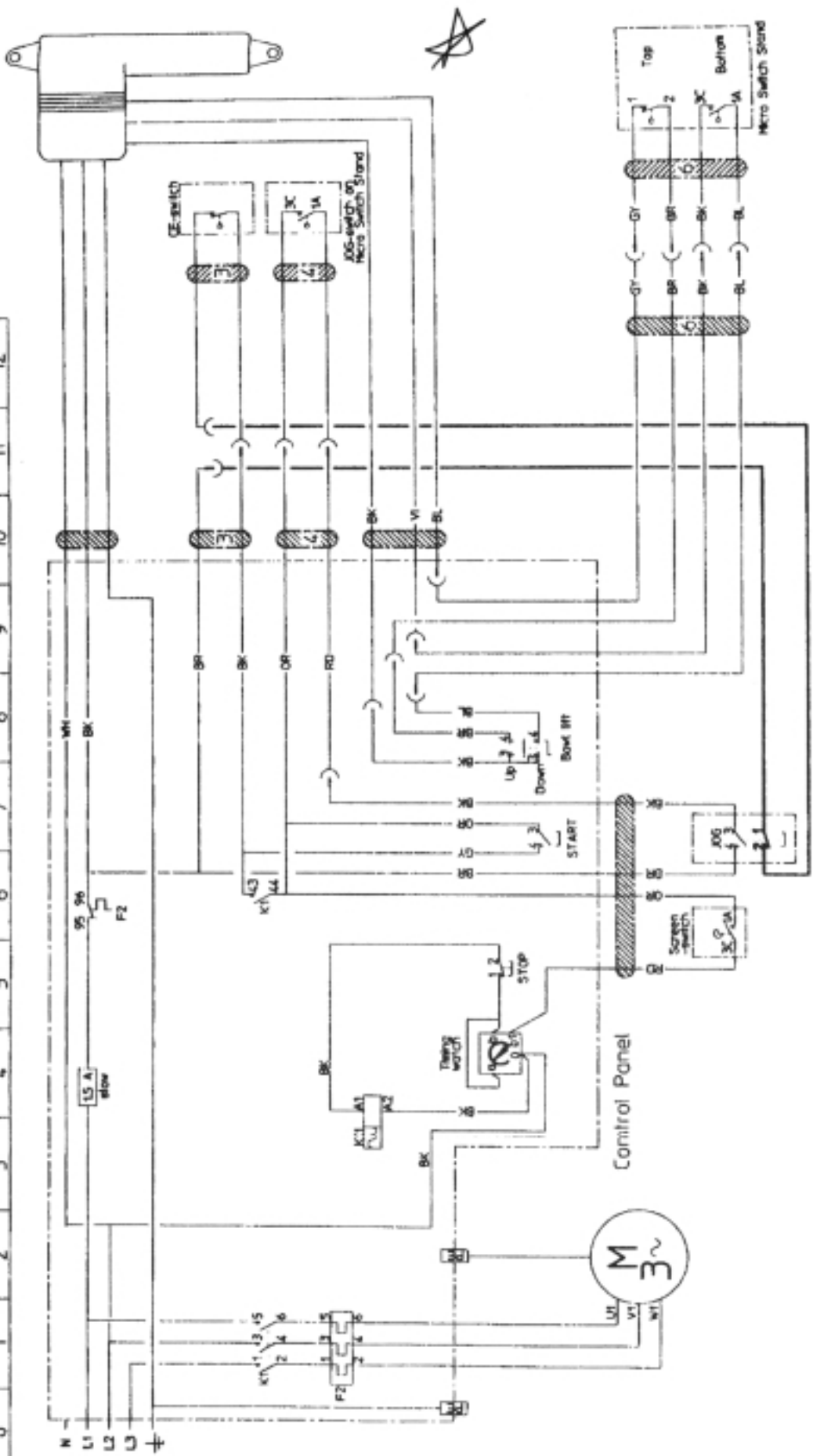




1998 & On
INSTRUMENT PANEL

Fig. No.	Order No.	Description
1	STA 3000	Cable Inlet
2	STA 3010	Nuts
3	31-152	Cover
4	30-453	Ground Label
5	60-86.1	Up/Down Switch
6	140-149.1	Front Panel
7	31-457	Ground Clamp
8	STA 5897	NUT M5
9	STA 6483	SCREW M5x15
10	STA 3017	Cable Inlet
11	STA 5080	SCREW M6x8
12	STA 5232	SCREW M4x8
13	31-174.4	Jog Switch
14	30-188.15	Timer 208V
15	31-174.2	Start Switch
16	31-174.3	Stop Switch
17	100-88.5	Contactors CI16 208V
18	20-88.24	Thermal Overload 11-16
19	20E-416.1	Fuse Holder
20	20E-418.3	Fuse

W150N MK-1
DEC. 12/97 -



NO/NC	
1	1
2	1
3	1
4	1

NO/NC	
1	1